Amendments to the Claims:

This claim listing will replace all prior versions and listings of claims in the application:

Claim Listing:

1-19. (Cancelled)

20. (Previously presented) An immunostimulatory oligonucleotide compound, comprising: an immunostimulatory dinucleotide of formula C*pG, C*pG* or CpG*, wherein C is a natural pyrimidine nucleoside, C* is a non-natural pyrimidine nucleoside, G is a natural purine nucleoside and G* is a non-natural purine nucleoside, and wherein p is an internucleotide linkage selected from the group consisting of phosphodiester, phosphorothioate and phosphorodithioate;

a 3'-3' linkage; and

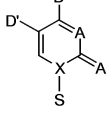
one or two accessible 5' ends.

21. (Original) The immunostimulatory oligonucleotide compound of claim 20, which oligonucleotide comprises two accessible 5' ends.

22.-40. (Canceled)

41. (Previously presented) The immunostimulatory oligonucleotide compound of claim 20, wherein G* is 7-deazaguanosine.

42. (Currently amended) An immunostimulatory oligonucleotide compound, comprising:an immunostimulatory dinucleotide of formula ~~CpG or~~ C*pG, wherein ~~C is a natural pyrimidine nucleoside,~~ C* is a non-natural pyrimidine nucleoside having formula (*I*):



(*I*)

wherein D is a hydrogen bond donor, D' is selected from the group consisting of hydrogen, hydrogen bond donor, hydrophilic group, hydrophobic group and electron donating group, A is a hydrogen bond acceptor or a hydrophilic group, X is carbon or nitrogen, and S is a pentose or hexose sugar ring, provided that the pyrimidine nucleoside of formula (*I*) is not cytidine or deoxycytidine, and G is a natural purine nucleoside, and wherein p is an internucleotide linkage selected from the group consisting of phosphodiester, phosphorothioate and phosphorodithioate;

a 3'-3' linkage; and

one or two accessible 5' ends.

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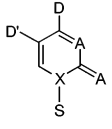
43. (Previously presented) The immunostimulatory oligonucleotide compound of claim 20, wherein the non-natural pyrimidine nucleoside has the formula (*I*):



(*I*)

wherein D is a hydrogen bond donor, D' is selected from the group consisting of hydrogen, hydrogen bond donor, hydrogen bond acceptor, hydrophilic group, hydrophobic group, electron withdrawing group and electron donating group, A is a hydrogen bond acceptor or a hydrophilic group, X is carbon or nitrogen, and S is a pentose or hexose sugar ring, provided that the pyrimidine nucleoside of formula (*I*) is not cytidine or deoxycytidine.

44. (Previously presented) The immunostimulatory oligonucleotide compound of claim 43, wherein the non-natural pyrimidine nucleoside includes a non-naturally occurring pyrimidine base.

45. (Currently amended) The immunostimulatory oligonucleotide compound of claim ~~0~~44, wherein the non-naturally occurring pyrimidine base is selected from the group consisting of 5-hydroxycytosine, 5-hydroxymethylcytosine, N4-alkylcytosine, and 4-thiouracil.

46. (Previously presented) The immunostimulatory oligonucleotide compound of claim 43, wherein the non-natural pyrimidine nucleoside of formula (*I*) comprises a non-naturally occurring sugar moiety.

47. (Previously presented) The immunostimulatory oligonucleotide compound of claim 46, wherein the non-naturally occurring sugar moiety is arabinose.

48. (Previously presented) The immunostimulatory oligonucleotide compound of claim 42, wherein the non-natural pyrimidine nucleoside includes a non-naturally occurring pyrimidine base.

49. (Currently amended) The immunostimulatory oligonucleotide compound of claim ~~0~~48, wherein the non-naturally occurring pyrimidine base is selected from the group consisting of 5-hydroxycytosine, 5-hydroxymethylcytosine, N4-alkylcytosine, and 4-thiouracil.

50. (Previously presented) The immunostimulatory oligonucleotide compound of claim 42, wherein the non-natural pyrimidine nucleoside of formula (*I*) comprises a non-naturally occurring sugar moiety.

51. (Previously presented) The immunostimulatory oligonucleotide compound of claim 50, wherein the non-naturally occurring sugar moiety is arabinose.